

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) A method of screening a compound or its salt comprising:

- (i) contacting *in vitro* cells comprising a G protein-coupled receptor protein comprising ~~substantially the same~~ amino acid sequence represented by SEQ ID NO: 1, SEQ ID NO: 3 or SEQ ID NO: 8; ~~wherein the G protein-coupled receptor protein has a G protein-coupled receptor function;~~ with a fatty acid or a salt thereof in the presence of the compound or its salt and in the absence of the compound or its salt,
- (ii) assaying a cell-stimulating activity stimulated by binding of the fatty acid or [[a]] the salt thereof to the G protein-coupled receptor protein in the presence of the compound or its salt and in the absence of the compound or its salt, wherein the cell-stimulating activity is at least one selected from intracellular cAMP production suppressing activity, MAP kinase phosphorylation or activation, adrenocorticotrophic hormone (ACTH) secretion suppressing activity, glycerol production suppressing activity, and lipolysis suppressing activity, [[and]]
- (iii) comparing the cell-stimulating activity stimulated by binding of the fatty acid or [[a]] the salt thereof to the G protein-coupled receptor protein in the presence of the compound or its salt and in the absence of the compound or its salt, and
- (iv) wherein selecting the compound or its salt which [[a]] changes [[in]] the cell-stimulating activity, indicates that the compound or its salt changes a binding property of the G protein-coupled receptor protein.

2. (Canceled)

3. (Currently amended) A method of screening a compound or its salt comprising:

- (i) contacting *in vitro* a G protein-coupled receptor protein comprising substantially the same amino acid sequence represented by SEQ ID NO: 1, SEQ ID NO: 3 or SEQ ID NO: 8, ~~wherein the G protein-coupled receptor protein has a G protein-coupled receptor function,~~ with a labeled fatty acid or a salt thereof in the presence of the compound or its salt and in the absence of the compound or its salt, wherein the fatty acid is selected from palmitoleic acid, linoleic acid, γ -linolenic acid, arachidonic acid, and docosahexaenoic acid,
- (ii) assaying the amount of binding of the labeled fatty acid or [[a]] the salt thereof to the G protein-coupled receptor protein in the presence of the compound or its salt and in the absence of the compound or its salt, [[and]]
- (iii) comparing the amount of binding of the labeled fatty acid or [[a]] the salt thereof to the G protein-coupled receptor protein in the presence of the compound or its salt and in the absence of the compound or its salt, and
- ~~(iv) wherein selecting the compound or its salt which [[a]] changes in binding indicates that the compound or its salt changes a~~ the amount of binding property of the G protein-coupled receptor protein.

4.-80. (Canceled)